SIEMENS

SITRANS F
Add-on module type HART/HART I
SITRANS F HART/HART I

Quick Start

Before installing, including in hazardous areas, refer to the Operating Instructions on the internet or on the SITRANS F documentation CD-ROM which is included in the product package. They contain detailed safety regulations, information and specifications which must be observed when installing. Documentation and approvals can be found on the internet:

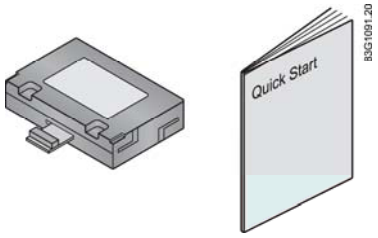
Flow documentation (http://www.siemens.com/flowdocumentation)

⚠ CAUTION
Proper handling
Correct, reliable operation of the device requires proper transport, storage, positioning and assembly. The device must be carefully operated and maintained. Only qualified personnel should install or operate this device.

Items supplied

Note

The matched paired transmitter and sensor shall be mounted together. Please check in the installation that the system nameplates of transmitter and sensor will have the same system serial number. (See marked nameplates in the figure.)



Safety notes

⚠ WARNING
NOT allowed for use in hazardous areas!
Equipment used in hazardous areas must be Ex-approved and marked accordingly! This device is NOT approved for use in hazardous areas!

⚠ WARNING
Potential hazard
This device can contain lithium batteries. Lithium batteries may present a potential hazard if they are abused electrically or mechanically.

Safety note for bronze sensors

NOTICE
Potential hazard
Do NOT unscrew bronze sensor transducers during operation!

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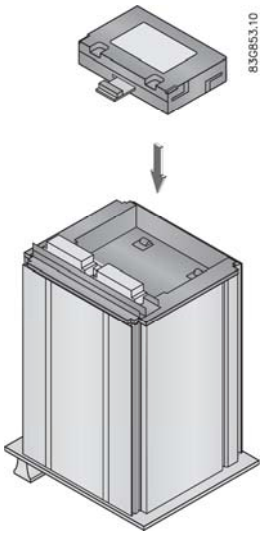
A5E01674032-005, 05/2013

Installing HART module on MAG/MASS 6000



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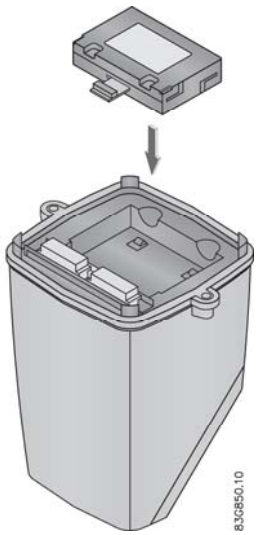

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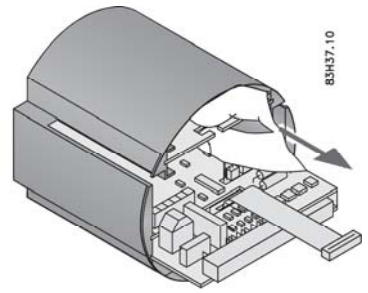

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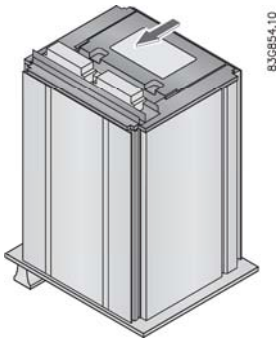

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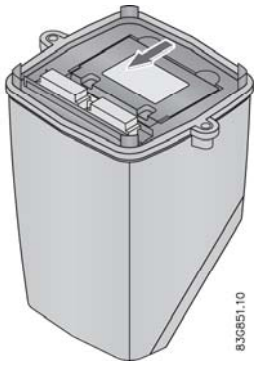

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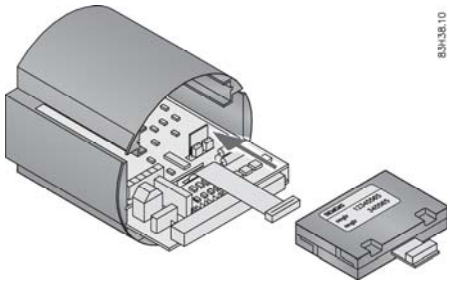

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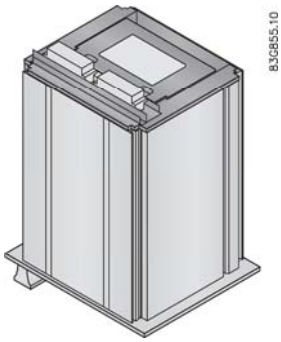

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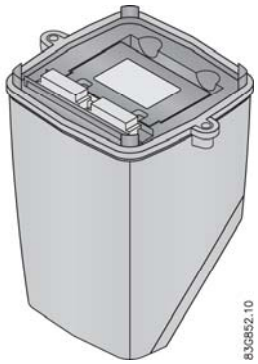

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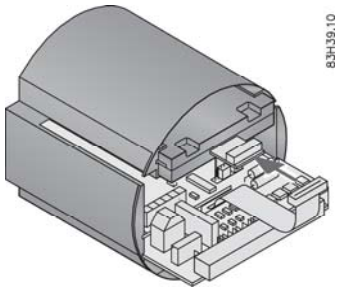
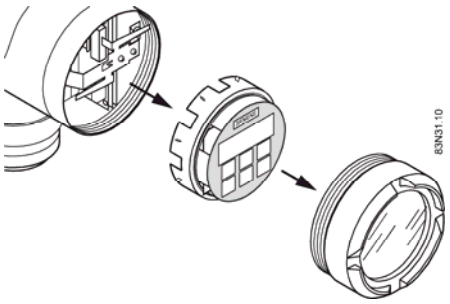


3

Note

The module must be firmly clicked into place!

Installing HART module on MAG 6000 I



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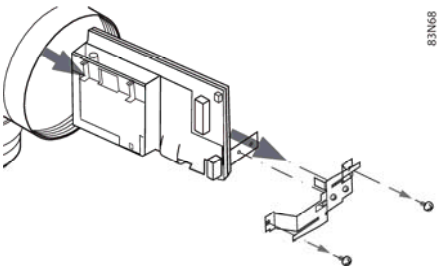

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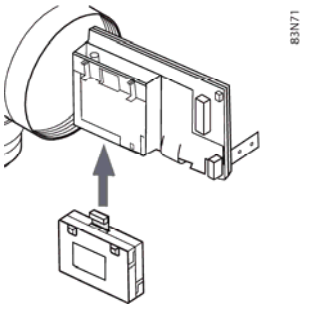

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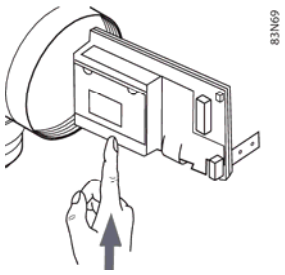
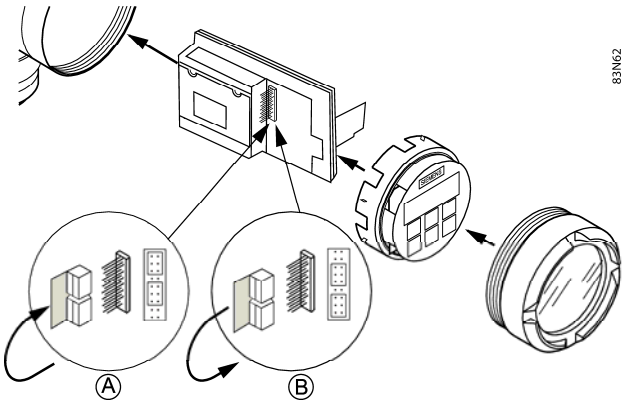


4

The module must be firmly clicked into place!



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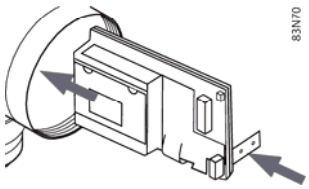
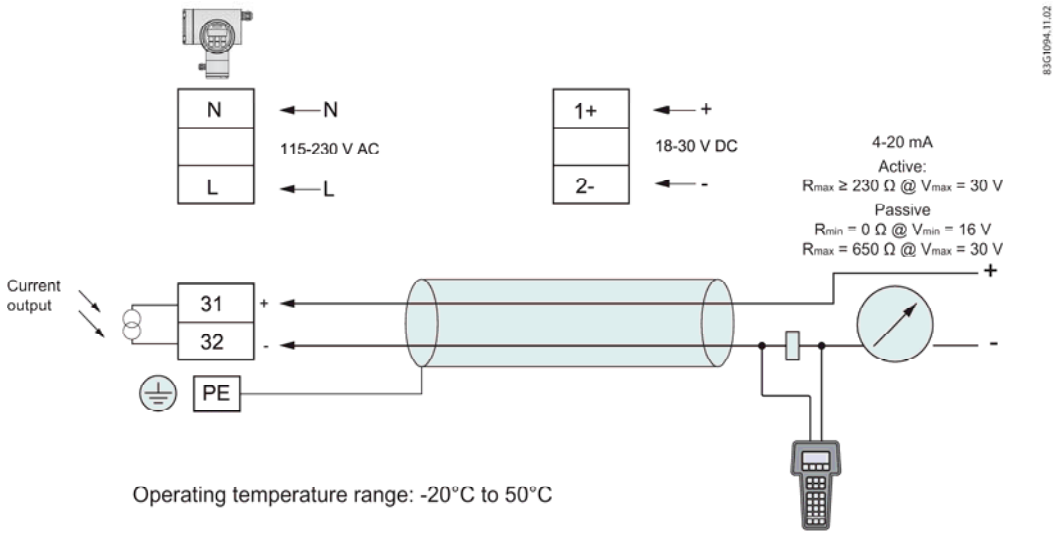


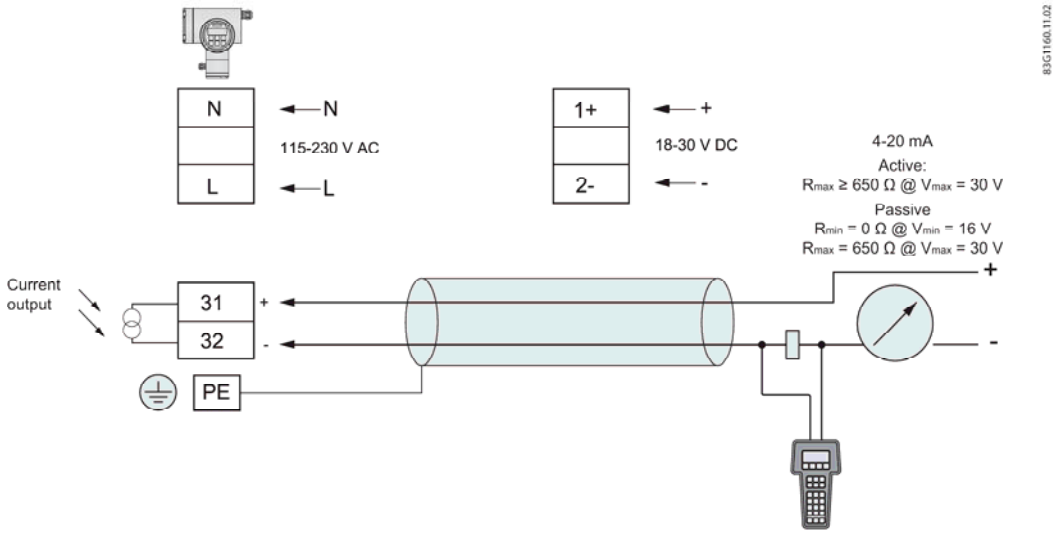
Pos. A = active - MAG 6000 I Ex only passive output - (factory default MAG 6000 I) Pos B = passive (factory default MAG 6000 I Ex)

Electrical connection HART I MAG 6000 I



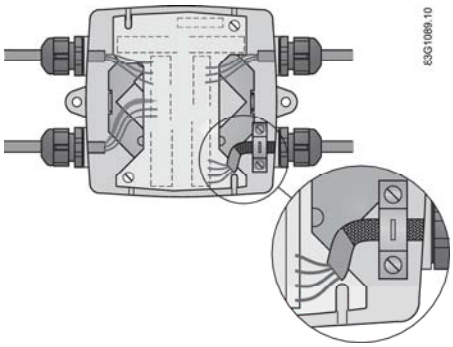
NOTICE
HART communication HART communication on active current output could be disturbed during operation in areas with a high frequency electromagnetic field.

Electrical connection HART MAG/MASS 6000

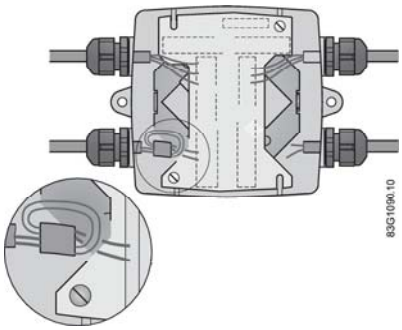


Terminal	Description
91	HART FSK signal +
	HART FSK signal -
31	Current output +
	Current output -
Shield/PE	Shield

EMC improvement for HART MAG/MASS 6000



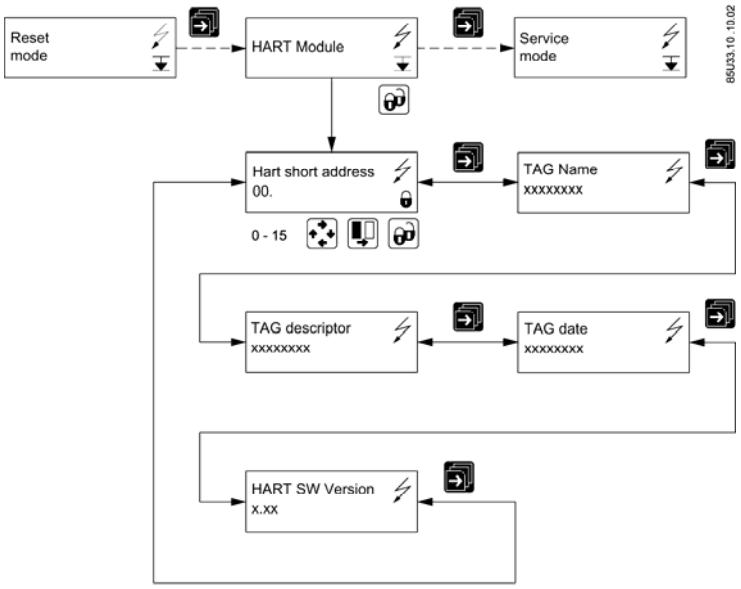
⚠ CAUTION
Avoid ground loops In order to avoid ground loops use equalizing cable.



Use ferrite cores with digital and analogue I/O.

Start-up routine

If the module has been installed correctly, a new menu entry is available. The menu holds all HART relevant information.



Menu structure HART/HART I

Functions

		Meaning	Default units
MAG 5000 C / MAG 6000 / MAG 6000 I	PV	Volumeflow	m^3/s
	SV	Totalizer 1	m^3
	TV	Totalizer 1	m^3
	QV	Not implemented	--
MASS 6000	PV	Massflow	kg/s
	SV	Density	kg/m^3
	TV	Temperature	°C
	QV	Volumeflow	m^3/s

The dynamic variables are fixed and cannot be mapped to other than the specified PV, SV, TV, and QV.

Device Integration

Device descriptions for SIMATIC PDM, AMS Device Manager, 275 Communicator and 375 Communicator are available for all MASS 6000, MAG 5000 and MAG 6000 variants.

The device descriptions are available for free download at http://support.automation.siemens.com

Siemens AG
Industry Sector
Postfach 48 48
90026 NÜRNBERG

SITRANS F HART/HART I
A5E01674032, 05/2013

SIEMENS

SITRANS F
Zusatzmodul Typ HART/HART I
SITRANS F HART/HART I

Quick Start

Vor der Installation, einschließlich in Ex-Bereichen bitte in den Betriebsanweisungen im Internet oder auf der zu SITRANS F gehörenden CD-ROM, die im Produktpaket enthalten ist, nachsehen. Hier finden Sie detaillierte Sicherheitsvorschriften, Informationen und technische Daten, die bei der Installation zu beachten sind. Dokumentationen und Zulassungen finden sich im Internet:

Durchflussdokumentation (http://www.siemens.com/flowdocumentation)

⚠ VORSICHT

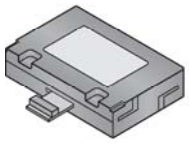
Sachgemäßer Umgang

Der einwandfreie und sichere Betrieb des Geräts setzt sachgemäßen Transport, sachgemäße Lagerung, Positionierung und Montage voraus. Das Gerät muss sorgfältig bedient und gewartet werden. IDieses Gerät darf nur von qualifiziertem Personal installiert oder bedient werden.

Lieferumfang

Hinweis

Die gepaarten Messumformer und Messaufnehmer müssen zusammen montiert werden. Bitte prüfen Sie bei der Installation, ob die Typenschilder von Messumformer und Messaufnehmer die gleiche Seriennummer haben (siehe gekennzeichnete Typenschilder in der Abbildung).



Sicherheitshinweise

⚠ WARNUNG

NICHT für den Einsatz in explosionsgefährdeten Bereichen!

In explosionsgefährdeten Bereichen eingesetzte Betriebsmittel müssen Ex-zugelassen und entsprechend gekennzeichnet sein!

Dieses Gerät ist NICHT für den Einsatz in explosionsgefährdeten Bereichen zugelassen!

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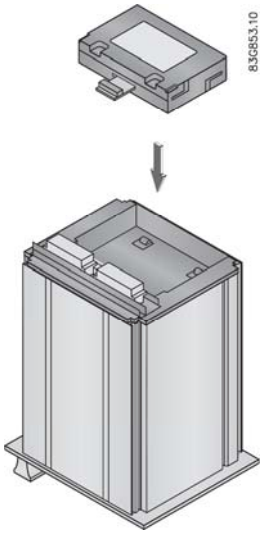
⚠ WARNUNG
Potenzielle Gefahr Dieses Gerät kann Lithium-Batterien enthalten. Lithiumbatterien können eine potenzielle Gefahr darstellen, wenn sie elektrisch oder mechanisch unsachgemäß verwendet werden.

Sicherheitshinweis für Messaufnehmer aus Bronze

ACHTUNG
Potentielle Gefahr Die Schallwandler der Bronze-Messaufnehmer NICHT während des Betriebs herausschrauben!

Installation von HART-Modulen beim MAG/MASS 6000



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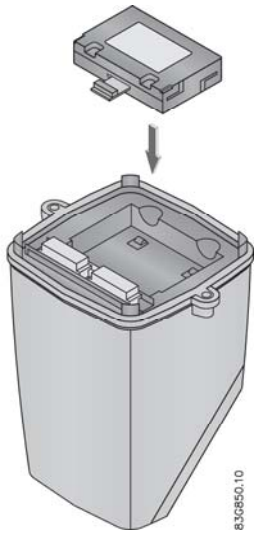

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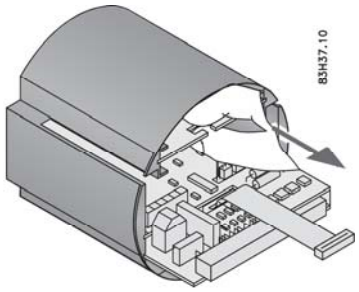

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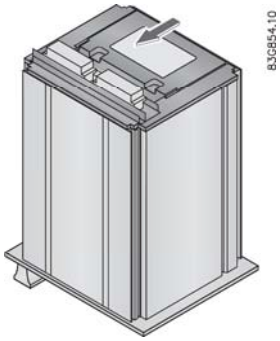

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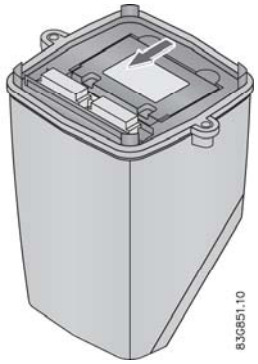

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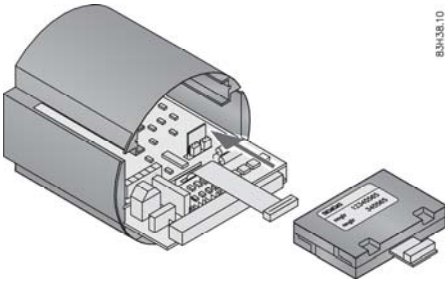

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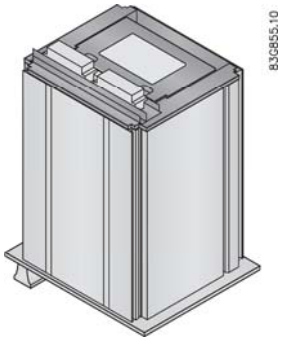

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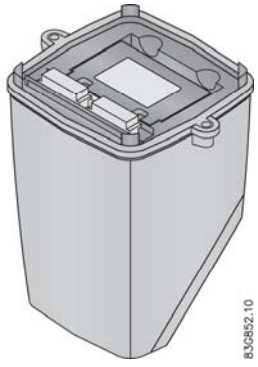

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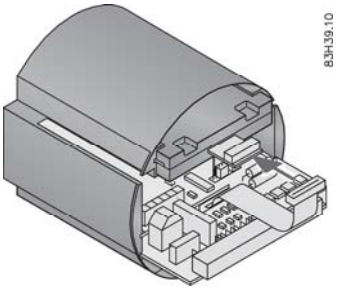
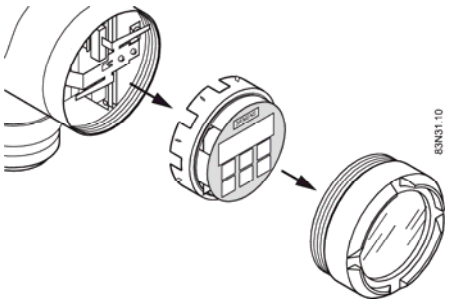


3

Hinweis

Das Modul muss beim Anbringen hörbar einrasten!

Installation von HART-Modulen beim MAG 6000 I



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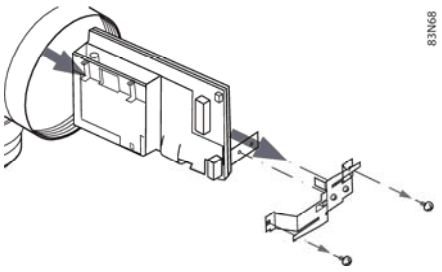

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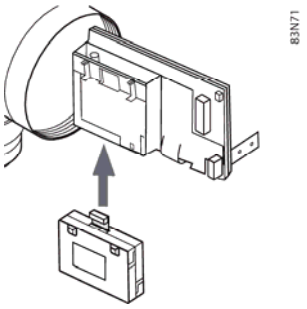

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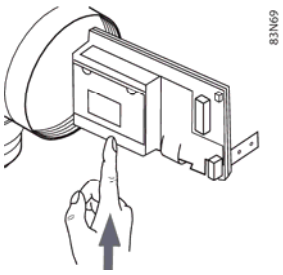

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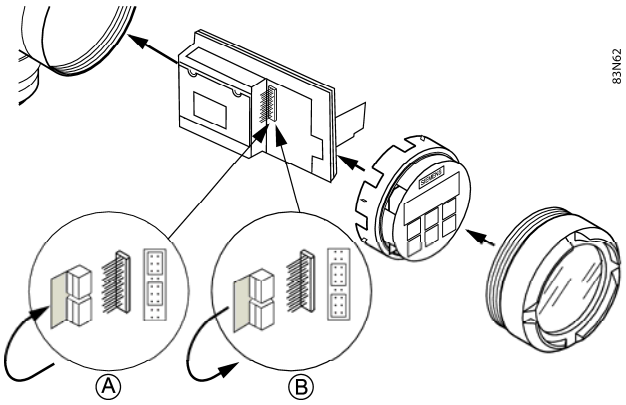
Das Modul muss beim Anbringen hörbar einrasten!



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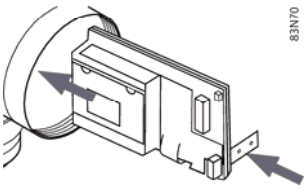
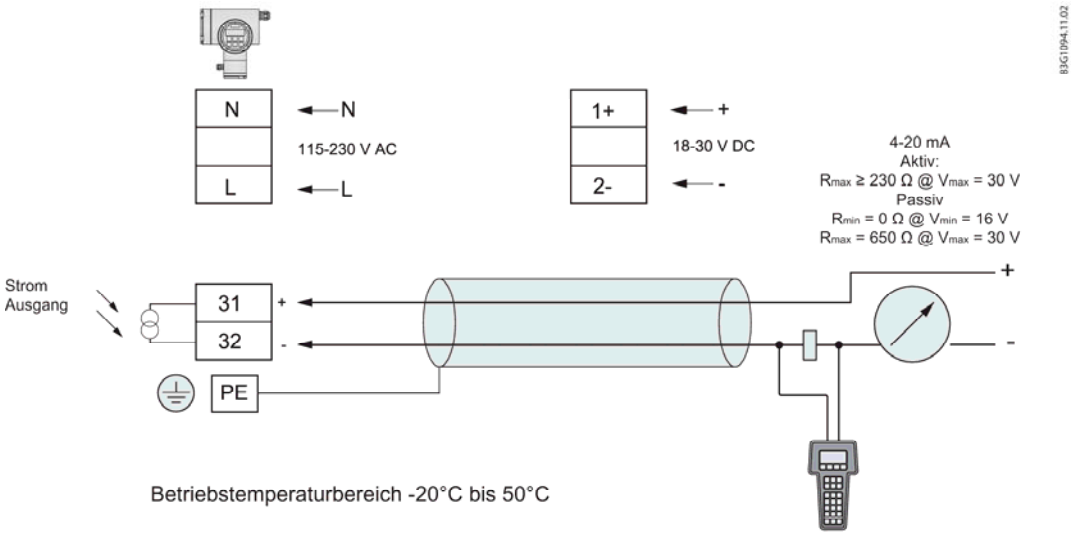


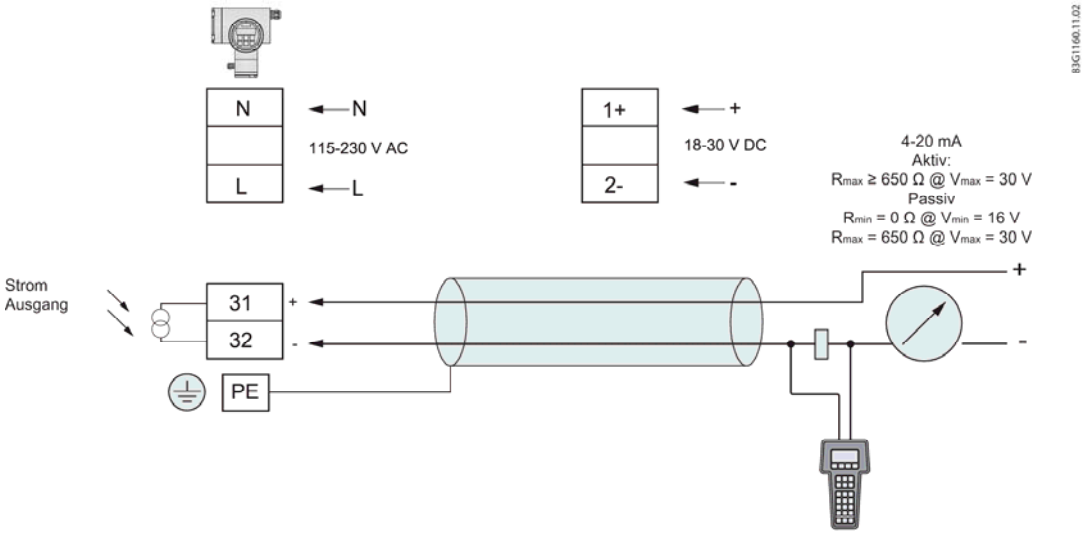
Pos. A = aktiv - MAG 6000 I Ex nur passiver Ausgang - (werkseitige Voreinstellung MAG 6000 I) Pos. B = passiv (werkseitige Voreinstellung MAG 6000 I Ex)

Elektrischer Anschluss HART I MAG 6000 I



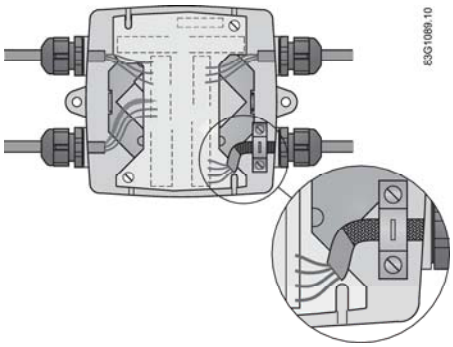
ACHTUNG
HART-Kommunikation Die HART-Kommunikation am aktiven Stromausgang könnte in Bereichen mit einem hochfrequenten elektromagnetischem Feld während des Betriebs gestört werden.

Elektrischer Anschluss HART MAG/MASS 6000

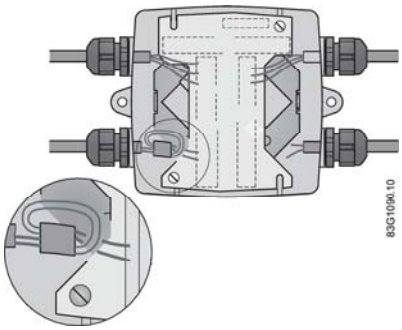


Anschluss	Beschreibung
91	HART FSK Signal +
	HART FSK Signal -
31	Stromausgang +
	Stromausgang -
Schirmung/PE	Schirmung

EMV-Verbesserung für HART MAG/MASS 6000



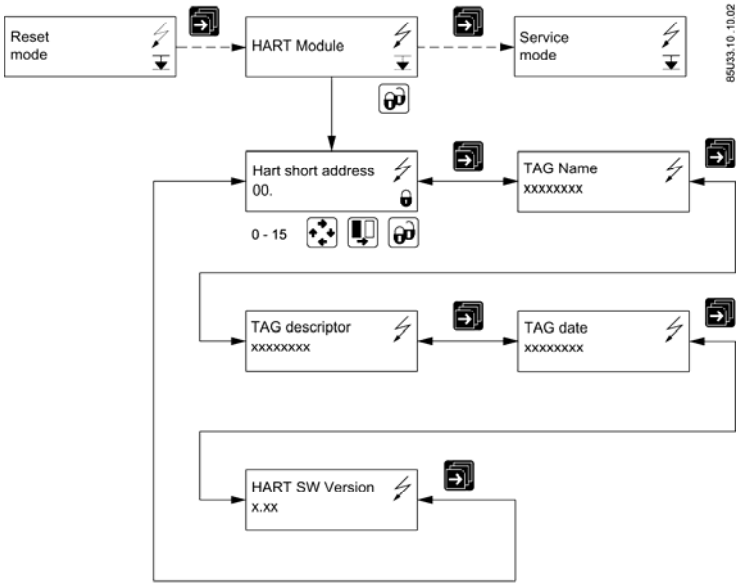
⚠ VORSICHT
Masseschleifen vermeiden Um Masseschleifen zu vermeiden, verwenden Sie ein Ausgleichskabel.



Verwenden Sie Ferritkerne mit digitalen und analogen Ein-/Ausgängen.

Einschaltroutine

Wenn das Modul korrekt installiert wurde, ist ein neuer Menüeintrag verfügbar. Das Menü enthält alle HART-relevanten Informationen.



Menüstruktur HART/HART I

Funktionen

		Bedeutung	Standardeinheiten
MAG 5000 C / MAG 6000 / MAG 6000 I	PV	Volumendurchfluss	m^3/s
	SV	Zähler 1	m^3
	TV	Zähler 1	m^3
	QV	Nicht implementiert	--
MASS 6000	PV	Massendurchfluss	kg/s
	SV	Dichte	kg/m^3
	TV	Temperatur	°C
	QV	Volumendurchfluss	m^3/s

Die dynamischen Variablen sind feststehend und können lediglich wie angegeben PV, SV, TV und QV zugeordnet werden.

Geräteintegration

Gerätebeschreibungen für SIMATIC PDM, AMS Device Manager, 275 Communicator und 375 Communicator sind für alle Varianten von MASS 6000, MAG 5000 und MAG 6000 verfügbar.

Die Gerätebeschreibungen stehen unter http://support.automation.siemens.com zum kostenlosen Download bereit.

Siemens AG
Industry Sector
Postfach 48 48
90026 NÜRNBERG

SITRANS F HART/HART I
A5E01674032, 05/2013

SIEMENS

SITRANS F
Módulo adicional tipo HART/HART I
SITRANS F HART/HART I

Quick Start

Antes de la instalación, también en áreas peligrosas, consulte las instrucciones de servicio en Internet o en el CD ROM de documentación de SITRANS F que se incluye en el paquete del producto. Estas contienen normas de seguridad detalladas, información y especificaciones que deben ser respetadas al realizar la instalación. La documentación y las aprobaciones se pueden encontrar en la internet:

Documentación del caudal (http://www.siemens.com/flowdocumentation)

⚠ PRECAUCIÓN

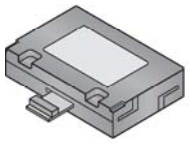
Manipulación correcta

Un funcionamiento correcto y confiable del dispositivo requiere un transporte, almacenamiento, posicionamiento y montaje apropiados. El dispositivo debe ser cuidadosamente utilizado y conservado. Este dispositivo solo debe ser instalado o utilizado por personal calificado.

Elementos suministrados

Nota

La pareja de convertidor y sensor debe montarse conjuntamente. Compruebe durante el montaje que en las placas de características del convertidor y el sensor figure el mismo número de serie (véanse las placas de características marcadas en la figura).



Consignas de seguridad

⚠ ADVERTENCIA

¡NO permitido para uso en zonas peligrosas!

Los equipos utilizados en zonas peligrosas deben estar certificados para Ex y debidamente marcados.

¡Este equipo NO está aprobado para el uso en zonas peligrosas!

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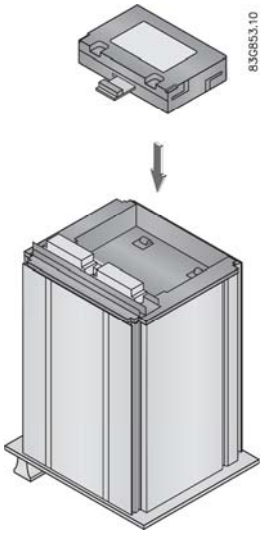
⚠ ADVERTENCIA
Riesgo potencial Este equipo puede contener baterías de litio. Las baterías de litio pueden presentar un riesgo potencial en caso de utilización eléctrica y mecánica indebida.

Nota de seguridad para sensores de bronce

ATENCIÓN
Riesgo potencial ¡NO desatornille los transmisores con sensores de bronce durante el servicio!

Instalar un módulo HART en MAG/MASS 6000



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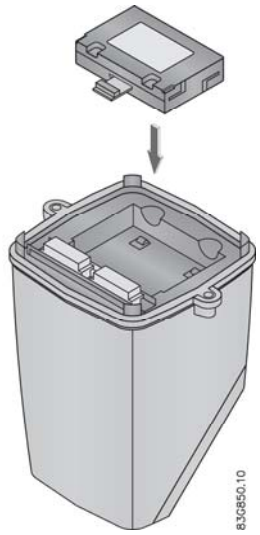

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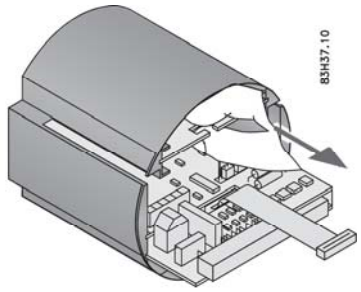

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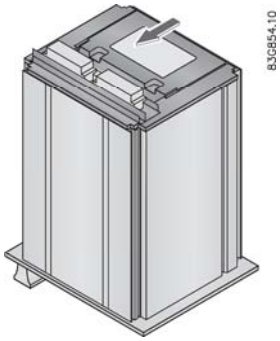

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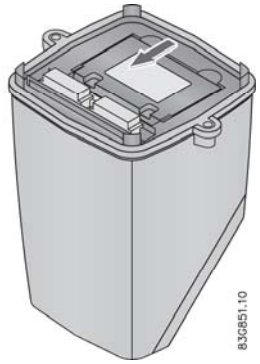

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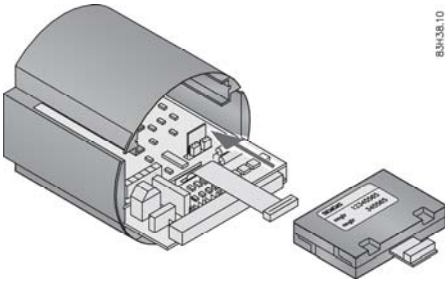

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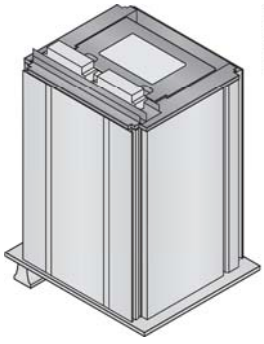

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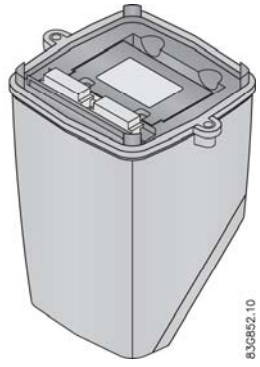

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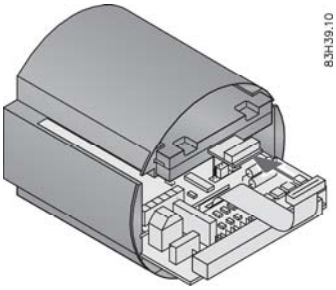
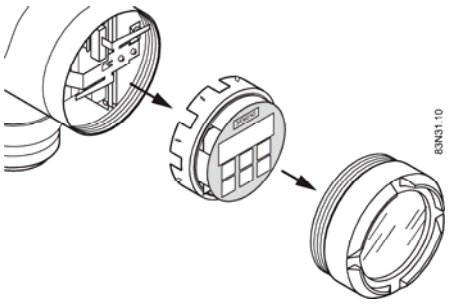


3

Nota

¡El módulo debe ser enganchado firmemente en su lugar!

Instalar un módulo HART en MAG 6000 I



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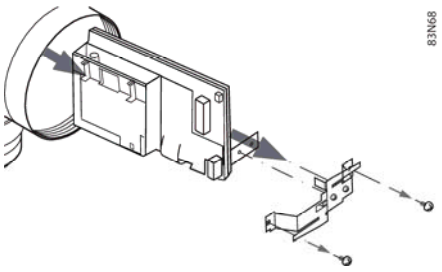

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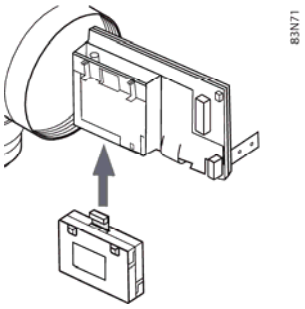

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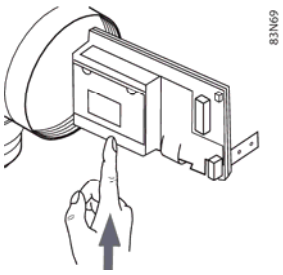

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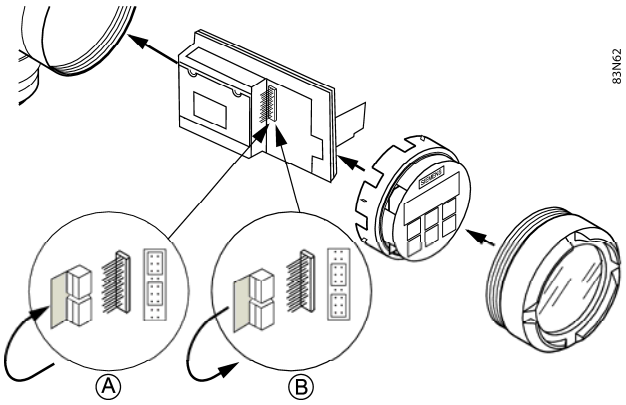
¡El módulo debe ser enganchado firmemente en su lugar!



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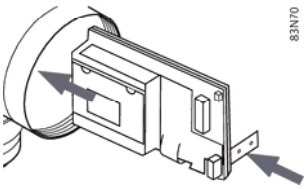
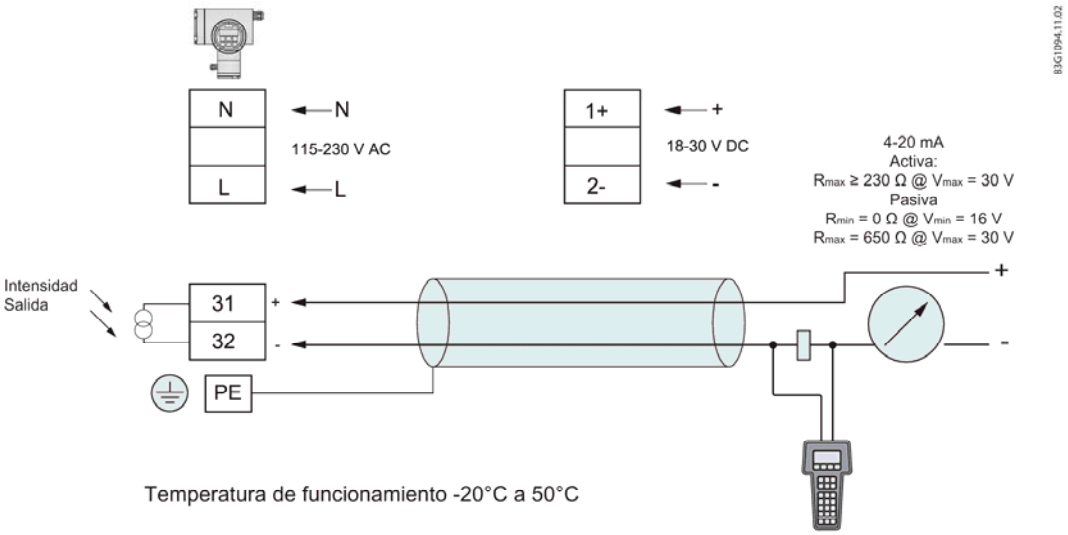


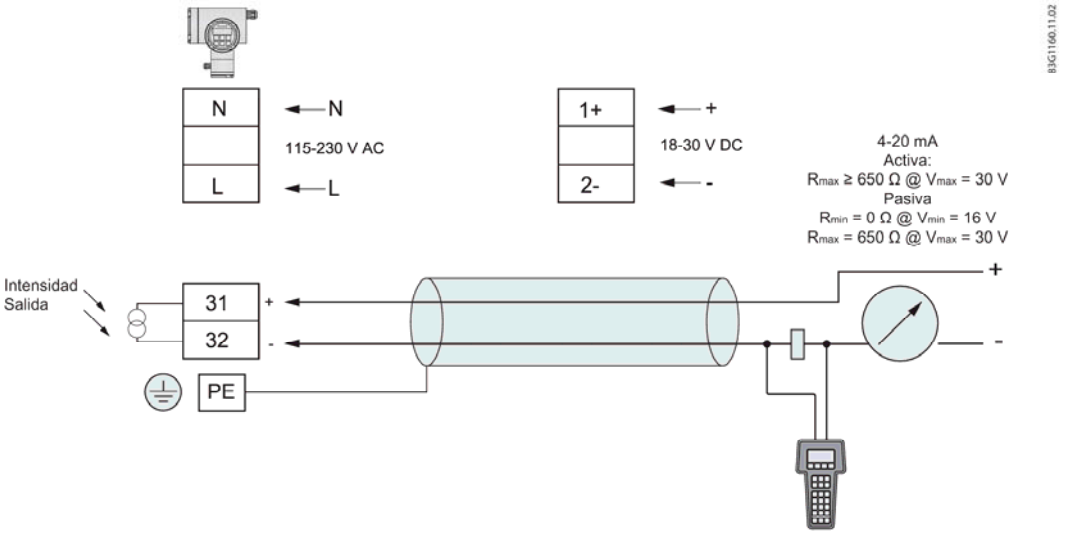
Pos. A = activo - MAG 6000 I Ex solo salida pasiva - (valor predeterminado MAG 6000 I) Pos. B = pasivo (valor predeterminado MAG 6000 I Ex)

Conexión eléctrica HART I MAG 6000 I



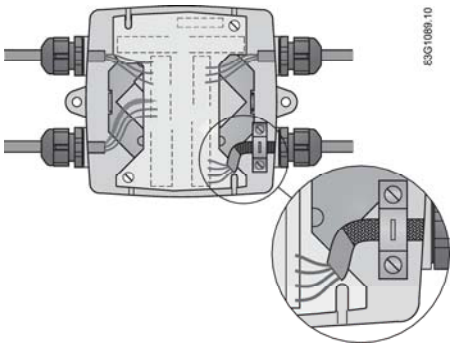
ATENCIÓN
Comunicación HART La comunicación HART en la salida de corriente activa podría verse perturbada durante el funcionamiento en áreas con un campo electromagnético de alta frecuencia.

Conexión eléctrica HART MAG/MASS 6000

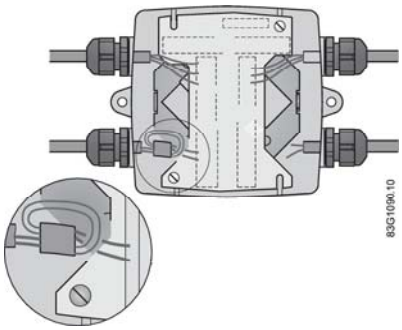


Terminal	Descripción
91	Señal HART FSK +
	Señal HART FSK -
31	Salida de corriente +
	Salida de corriente -
Pantalla/PE	Pantalla

Mejora de la CEM para HART MAG/MASS 6000



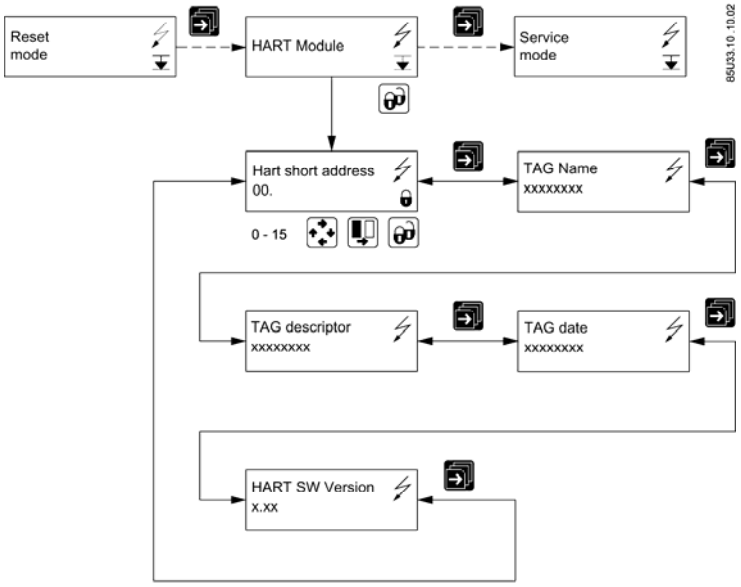
⚠ PRECAUCIÓN
Evitar los bucles de tierra Para evitar los bucles de tierra deben utilizarse cables de compensación.



Use núcleos de ferrita con E/S digitales y analógicas.

Rutina de arranque

Si el módulo se ha instalado correctamente aparecerá una nueva entrada de menú. El menú contiene toda la información HART relevante.



Estructura de menú HART/HART I

Funciones

		Significado	Unidades predeterminadas
MAG 5000 C / MAG 6000 / MAG 6000 I	PV	Caudal volumétrico	m^3/s
	SV	Totalizador 1	m^3
	TV	Totalizador 1	m^3
	QV	No implementado	--
MASS 6000	PV	Caudal másico	kg/s
	SV	Densidad	kg/m^3
	TV	Temperatura	°C
	QV	Caudal volumétrico	m^3/s

Las variables dinámicas son fijas y no se pueden disociar de los valores PV, SV, TV y QV especificados.

Integración de dispositivos

Están disponibles descripciones de dispositivos para SIMATIC PDM, AMS Device Manager, 275 Communicator y 375 Communicator para todas las variantes MASS 6000, MAG 5000 y MAG 6000.

Las descripciones de dispositivos pueden descargarse gratuitamente en http://support.automation.siemens.com.

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Industry Sector
Postfach 48 48
90026 NÜRNBERG

SITRANS F HART/HART I
A5E01674032, 05/2013

SIEMENS

SITRANS F
Module additionnel type HART/HART I
SITRANS F HART/HART I

Quick Start

Avant toute installation, en particulier dans une zone dangereuse, consultez les instructions de service sur Internet ou sur le CD-ROM de documentation consacré au SITRANS F qui est compris dans l'emballage du produit. Il contient des règles de sécurité, des informations et des spécifications détaillées dont il faut tenir compte au cours de l'installation. La documentation et les autorisations peuvent être consultées sur Internet :

Documentation du flux (http://www.siemens.com/flowdocumentation)

⚠ PRUDENCE

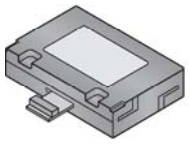
Manipulation correcte

Un fonctionnement correct et fiable du produit implique le respect de certaines règles concernant le transport, le stockage et le montage. L'appareil doit être utilisé avec soin et faire l'objet d'une maintenance adaptée. Il doit être installé et utilisé exclusivement par du personnel qualifié.

Pièces fournies

Remarque

Les transducteurs et capteurs appariés doivent toujours être montés ensemble. Vérifiez dans l'installation que les plaques signalétiques système du transducteur et du capteur comportent le même numéro de série système. (Voir les plaques signalétiques marquées sur la figure.)



Règles de sécurité

⚠ ATTENTION

Utilisation INTERDITE en zones à risque d'explosion !

Les appareils utilisés en zones à risque d'explosion doivent être agréés Ex et marqués en conséquence.

Cet appareil n'est pas agréé pour l'utilisation en zones à risque d'explosion !

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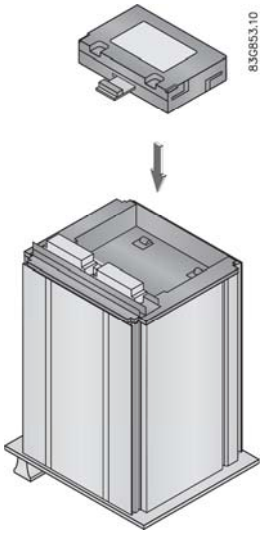
⚠ ATTENTION
Danger potentiel Cet appareil peut contenir des piles au lithium. Les piles au lithium peuvent représenter un danger potentiel en cas de mauvaise manipulation électrique ou mécanique.

Règle de sécurité pour capteurs en bronze

IMPORTANT
Danger potentiel NE PAS dévisser les transducteurs en bronze durant l'opération !

Installation du module HART sur le MAG/MASS 6000



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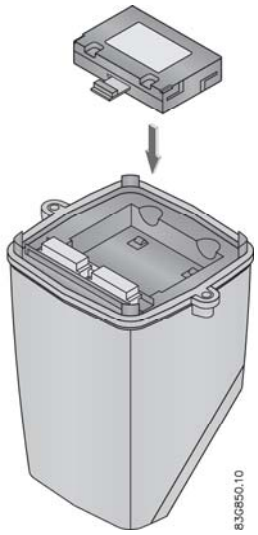

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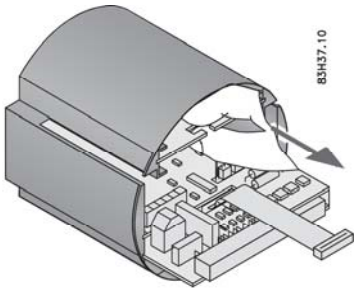

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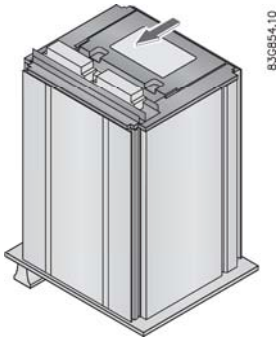

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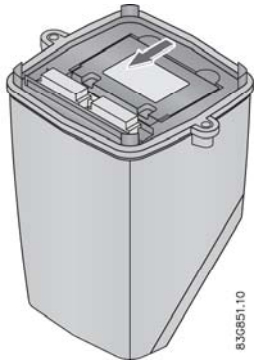

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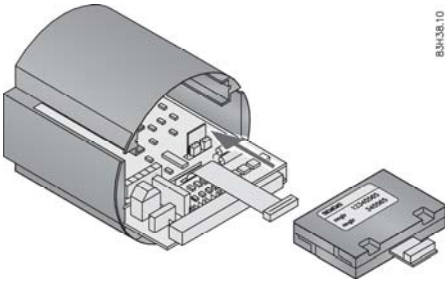

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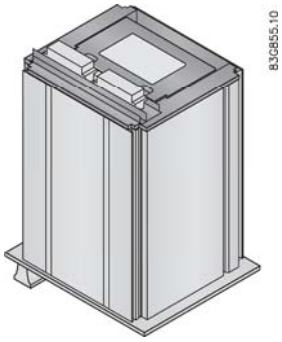

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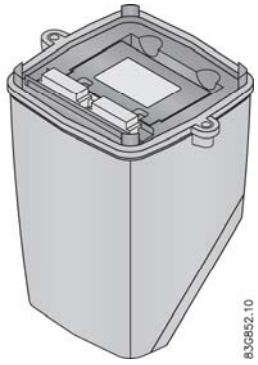

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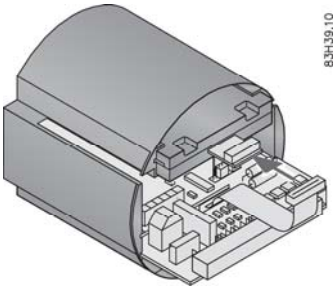
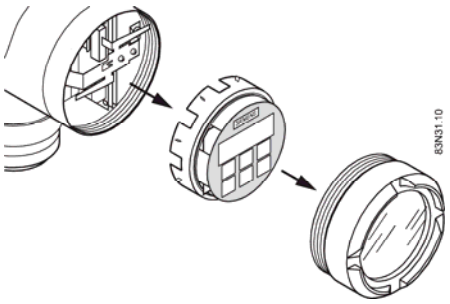


3

Remarque

Le module doit être fermement encliqueté !

Installation du module HART sur le MAG 6000 I



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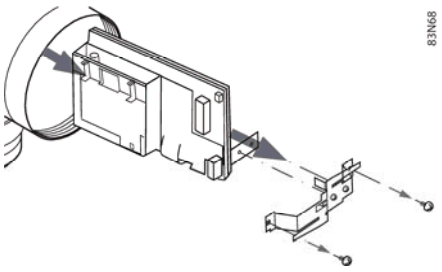

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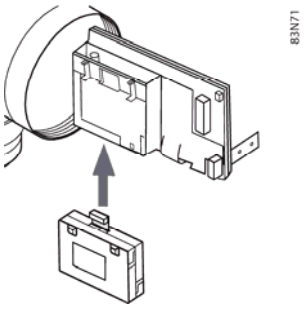

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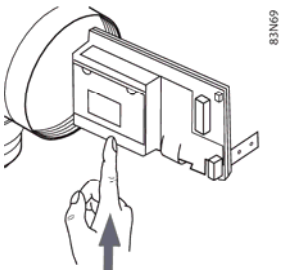
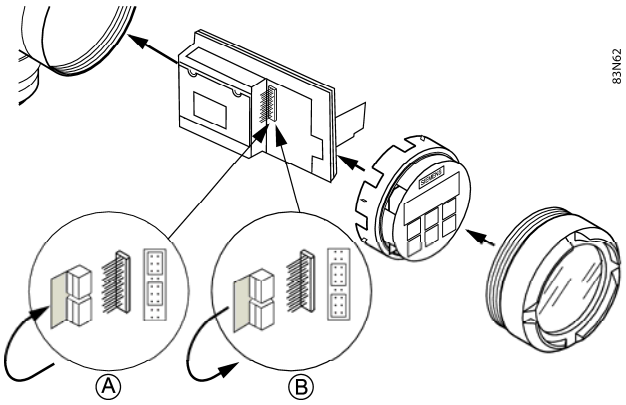


4

Le module doit être fermement encliqueté !



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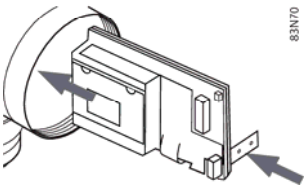
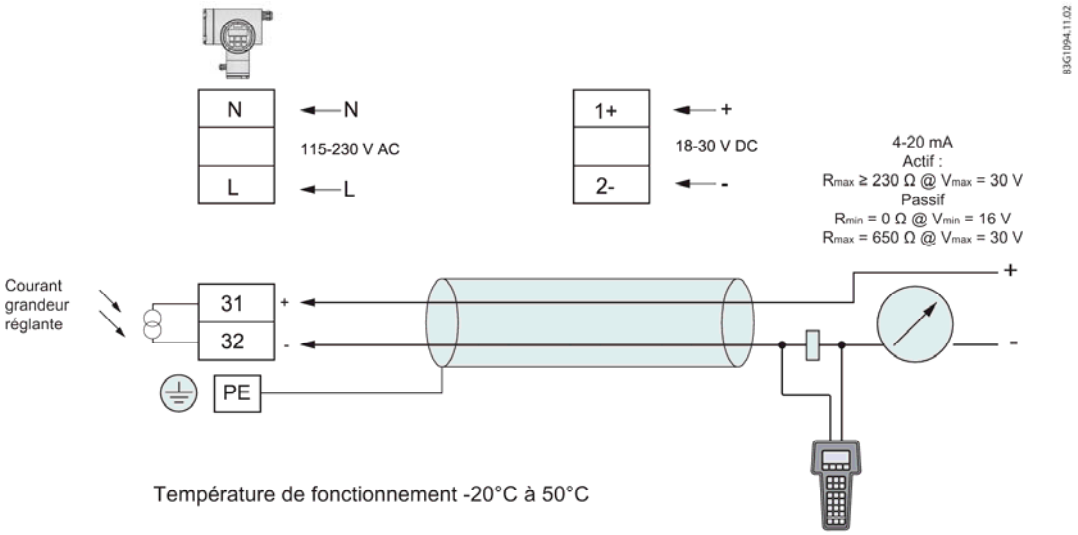


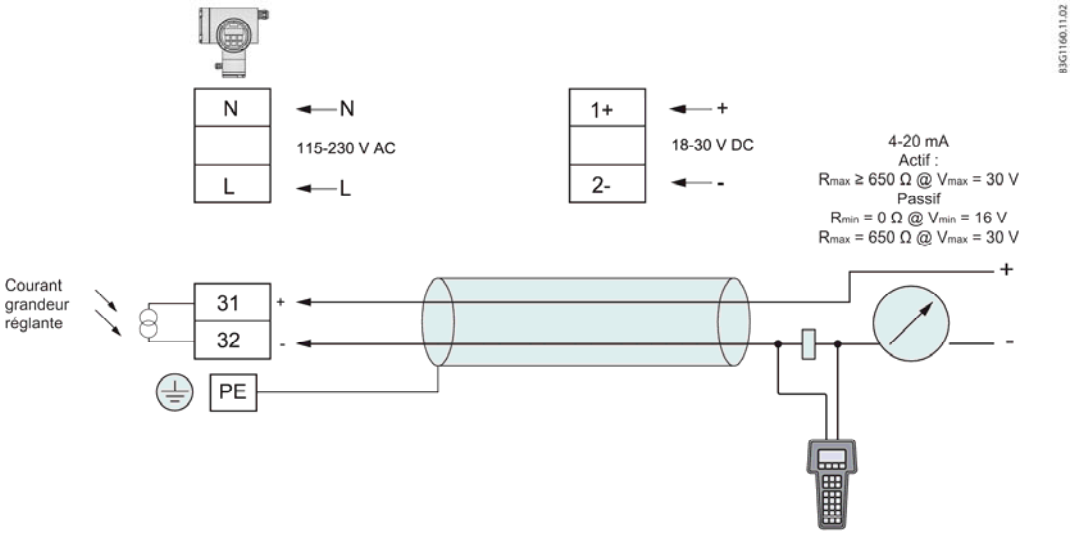
Pos. A = active - MAG 6000 I Ex sortie passive uniquement (par défaut : MAG 6000 I), pos. B = passive (par défaut : MAG 6000 I EX)

Raccordement électrique HART I MAG 6000 I



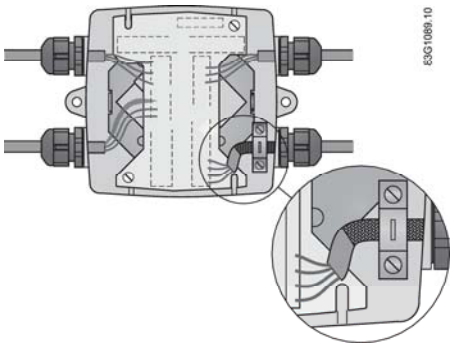
IMPORTANT
Communication HART La communication HART sur la sortie de courant active pourrait être perturbée pendant le fonctionnement dans des zones ayant un champ électromagnétique à haute fréquence.

Raccordement électrique HART MAG/MASS 6000

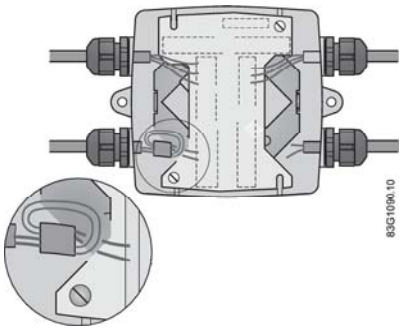


Borne	Description
91	Signal HART FSK +
	Signal HART FSK -
31	Sortie de courant +
	Sortie de courant -
Blindage / PE	Blindage

Amélioration CEM pour le HART MAG/MASS 6000



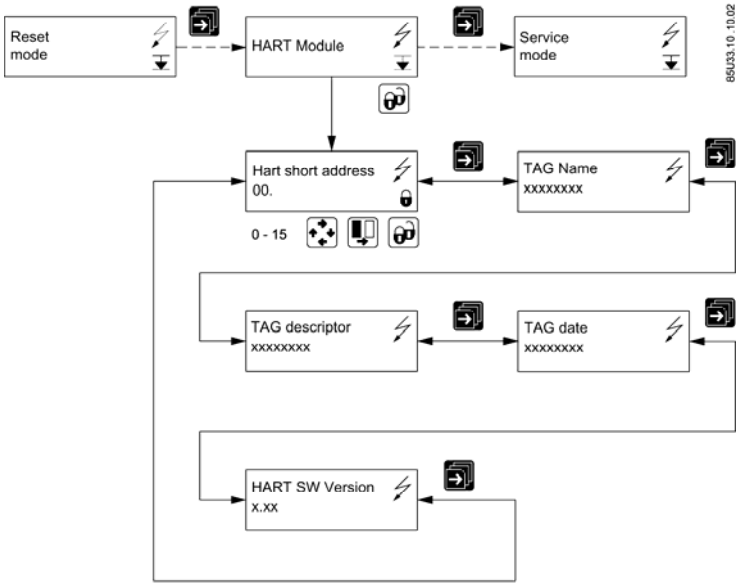
⚠ PRUDENCE
Evitez les boucles de mise à la terre Utiliser un câble de compensation pour éviter les boucles de mise à la terre.



Utiliser des noyaux en ferrite avec E/S TOR et analogiques.

Sous-programme de mise en route

Lorsque le module est installé correctement, l'utilisateur accède à un nouveau menu. Le menu regroupe toutes les données relatives au protocole HART.



Structure du menu HART/HART I

Fonctions

		Signification	Unités par défaut
MAG 5000 C / MAG 6000 / MAG 6000 I	PV	Débit volumique	m^3 / s
	SV	Totalisateur 1	m^3
	TV	Totalisateur 1	m^3
	QV	Non utilisé	--
MASS 6000	PV	Débit massique	kg/s
	SV	Densité	kg/m^3
	TV	Température	°C
	QV	Débit volumique	m^3 / s

Les variables dynamiques ne sont pas dissociables des valeurs PV, SV, TV et QV.

Intégration de l'appareil

Des fichiers DD pour SIMATIC PDM, AMS Device Manager, 275 Communicator et 375 Communicator sont disponibles pour tous les appareils MASS 6000, MAG 5000 et MAG 6000.

Ces fichiers DD sont téléchargeables gratuitement sur notre site http:// support.automation.siemens.com

Siemens AG
Industry Sector
Postfach 48 48
90026 NÜRNBERG

SITRANS F HART/HART I
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